

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently amended) A method of producing electrolyzed water containing ozone by using an apparatus for producing electrolyzed water from a liquid, wherein:

the apparatus comprises two plate electrodes facing each other, a direct current power source for applying a direct current voltage across the two plate electrodes and a control circuit for changing a polarity of the two plate electrodes alternately, wherein the two plate electrodes define a clearance of no greater than about 3.0 mm ~~or less between them~~ therebetween and define a flow passage extending ~~along them~~ therealong;

the method comprising a first step, a second step and a third step,

in the first step, introducing the liquid ~~being introduced~~ into the flow passage,

in the second step, applying the direct current voltage ~~being applied~~ across the two plate electrodes by the direct current power source and alternately changing the polarity of the two plate electrodes ~~being changed alternately~~ at an interval of time T by the control circuit to produce electrolyzed water while the liquid is flowing through the flow passage, and

in the third step, letting the electrolyzed water ~~being let~~ out of the flow passage,

the first, second and third steps being simultaneously and continuously executed;

wherein the interval of time T is defined by formula (10):

$$0.5 \text{ (sec.)} \leq T \leq (1/3) \times (L/V) \quad \dots (10)$$

wherein;

V: Velocity of flow of the liquid in the flow passage (cm/sec.), and

L: Length of the two plate electrodes as measured in the direction of flow of the liquid (cm).

2. (Currently amended) The method according to claim 1, wherein the time T is set between about 0.5 and 60 seconds.

3. (Currently amended) A method of producing electrolyzed water containing ozone by using an apparatus for producing electrolyzed water from a liquid;

the apparatus comprising:

an electrolytic cell;

an inlet ~~means~~ for allowing a liquid forced into the cell to flow through;

a first electrode plate placed in the cell;

a second electrode plate placed in the cell and facing the first electrode plate;
a direct current power source for applying a direct current voltage to the first and second electrode plates so as to produce a potential difference therebetween;
a control circuit for changing a polarity of the electrode plates alternately; and
an outlet ~~pipe~~ through which electrolyzed water produced in the cell is let out of the cell;

wherein:

the first electrode plate ~~is close to~~ and the second electrode plate are mutually spaced apart to ~~and the two plates~~ define a clearance of no greater than about 3.0 mm or less between them therebetween and define a flow passage extending along them therealong, and

an interval of time T for changing the polarity of the electrode plates can be set between about 0.5 and 60 seconds;

the method comprising a first step, a second step and a third step,

in the first step, introducing the liquid ~~being introduced~~ from the inlet ~~means~~ into the flow passage,

in the second step, applying the direct current voltage ~~being applied~~ across the two plates by the direct current power source and alternately changing the polarity of the two electrode plates ~~being changed alternately~~ at the interval of time T by the control circuit to produce electrolyzed water while the liquid is flowing through the flow passage, and

in the third step, the electrolyzed water being let out of the outlet pipe,
the first, second and third steps being simultaneously and continuously
executed.

4. (Currently amended) The method according to claim 3, wherein a one
of the two electrode plates is a perforated electrode plate having a plurality of
through openings, while ~~the other~~ a remaining one of said two electrode plates is a
non-perforated electrode plate ~~one not having any such opening~~.

5. (Original) A method of producing electrolyzed water containing
ozone by using an apparatus for producing electrolyzed water from a liquid;
the apparatus comprising:
an electrolytic cell;
an inlet means for allowing a liquid forced into the cell to flow through;
a first electrode plate placed in the cell;
a second electrode plate placed in the cell and facing the first electrode plate;
a direct current power source for applying a direct current voltage to the first
and second electrode plates so as to produce a potential difference therebetween;
a control circuit for changing a polarity of the electrode plates alternately; and
an outlet pipe through which electrolyzed water produced in the cell is let out
of the cell;

wherein: the first electrode plate is close to the second electrode plate and the two plates define a clearance of 3.0 mm or less between them and define a flow passage extending along them, and

each of the electrode plates having non-perforated and perforated portions appearing alternately in the direction of flow of the liquid, the non-perforated portions of one of the electrode plates facing the perforated portions of the other;

the method comprising the step of introducing the liquid from the inlet means into the flow passage to let out the electrolyzed water from the outlet pipe.

6. (New) The method according to claim 1, wherein by setting said interval of time T, an amount of oxygen molecules gathered in a vicinity of a one of said two plate electrode is greater than another amount of oxygen molecules gathered in a vicinity of a remaining one of said two plate electrodes, and an ozone concentration in the vicinity of said one of said two plate electrodes is increased in comparison to another ozone concentration in the vicinity of the remaining one of said two plate electrodes.

7. (New) A method of generating electrolytic water according to claim 3, wherein

said interval of time T is set between about 0.5 and 60 seconds,

whereby an amount of oxygen molecules gathered in a vicinity of a one of

said first and second electrode plates is greater than another amount of oxygen molecules gathered in a vicinity of a remaining one of said first and second electrode plates, and an ozone concentration in the vicinity of said one of said first and second electrode plates is increased in comparison to another ozone concentration in the vicinity of the remaining one.

8. (New) A method of producing electrolyzed water containing ozone, comprising:

arranging first and second plate electrodes to face each other and being spaced apart from one another to define a flow passage therebetween extending therealong;

introducing a liquid into the flow passage;

applying a direct current voltage across the first and second plate electrodes;
and

alternately changing a respective polarity of the first and second plate electrodes back and forth at an interval of time effective for producing electrolyzed water containing ozone while the liquid is flowing through the flow passage.

9. (New) The method according to claim 8, further comprising letting the electrolyzed water out of the flow passage.

10. (New) The method according to claim 8, wherein said steps of introducing, applying and alternately changing are simultaneously and continuously executed.

11. (New) The method according to claim 8, wherein the interval of time T is defined by formula (10):

$$0.5 \text{ (sec.)} \leq T \leq (1/3) \times (L/V) \quad \dots (10)$$

wherein;

V: The velocity of flow of the liquid in the flow passage (cm/sec.), and

L: The length of the two electrodes as measured in the direction of flow of the liquid (cm).

12. (New) The method according to claim 8, wherein a clearance between the first and second plate electrodes is no greater than about 3 mm.

13. (New) The method according to claim 8, wherein a one of said first and second plate electrodes is a perforated electrode plate having a plurality of through openings, and a remaining one of said first and second plate electrodes is a non-perforated electrode plate.

14. (New) The method according to claim 8, wherein the interval of time is determined as a function of a velocity of flow of the liquid in the flow passage and a length of the two electrodes as measured in the direction of flow of the liquid.